with carbon in the electric furnace, giving calcium carbid. Moissan suggests that calcium nitrid might possibly have some industrial importance in the formation of ammonia from atmospheric nitrogen.

IN the November number of the *American Chemical Journal* Professor Mallet describes an effort made to prepare what Sergius Kern had announced in 1877 as a new metal in platinum ore and named davyum. The metal possessed peculiar interest from its supposed atomic mass of 154, thus being a representative of a hitherto unknown group of platinum metals, lying intermediate between the two groups ruthenium, rhodium, palladium and osmium, iridium, platinum. Following Kern's directions and using residues furnished by Mr. George Matthey, of Johnson, Matthey & Co., Professor Mallet obtained a small residue, which agreed very closely with Kern's description of davyum. A careful examination showed that it was not elementary, but was composed of rhodium and iridium with a trace of iron. Thus the existence of an element davyum must be considered extremely doubtful.

IN the same journal Professor Keiser makes a contribution to the literature of the quantitative synthesis of water. In his experiments the hydrogen, oxygen and water formed were all weighed directly. His results give for the ratio of atomic mass of hydrogen to that of oxygen 15.874 when calculated from the ratio of hydrogen to oxygen used, and 15.886 when calculated from the ratio of hydrogen used to water formed. The mean 15.88 is thus very close to Professor Morley's figure of 15.879.

J. L. H.

CURRENT NOTES ON ANTHROPOLOGY.

EGYPTIAN ORIGINS.

A RUSH of papers has recently appeared discussing the origin of the ancient Egyptians. Most of them were suggested by De Morgan's work and excavations. A brief review of these, by Henry de Morgan, is in the 'Proceedings' of the American Numismatic and Archæological Society (fortieth meeting, 1898). Few of the writers altogether subscribe to De Morgan's theory of Asiatic origins. In *L'Anthropologie* (1898, Nos. 3 and 4) M. de Bissing, in a lengthy critique, condemns it as hasty and unfounded, claiming the elements of Egyptian civilization to be distinctly African. The distinguished Russian, Professor Anoutchine, and Schweinfurth, the traveler, both maintain that early Egyptian culture descends directly from the local neolithic period, and, while borrowing from Asia, was in no fair sense derived from that continent. This, too, is the position of Dr. E. Fraas, published in the *Correspondenzblatt* of the German Anthropological Society.

It is safe to conclude that De Morgan has by no means convinced his most competent critics.

YUCATECAN RUINS.

THE imposing ruins of a town known to the Indians as Xkichmook lie in a rocky valley about fifty miles east of Campeche. An accurate and fully illustrated report upon them by Mr. Edward H. Thompson is given in Volume II., No. 3, of the Field Columbian Museum publications. They consist of ten separate edifices of cut stone, mounds, terraces and reservoirs. Mural paintings are frequent, but mostly obliterated; incised figures are comparatively rare. Pottery is abundant, and also chipped stone implements; while polished stone objects are scarce. Obsidian is slightly represented, and metals were not exhumed.

The principal structure, called 'the Palace,' is an edifice of note. It towers eighty feet above the surrounding level, and its massive walls loom up like the face of some grim fortress.

SLAVIC ANTIQUITIES.

Professor Dr. Lubor Niederle, of the University of Prague, is widely and creditably known as one of the leading Slavic anthropologists; and it is quite appropriate, therefore, that he should appear as editor of a journal devoted to the collection of works and essays on Slavic archæology (*Vestnik Slovanskych Starozitnosti*), the first number of which has recently been issued. Its articles are printed either in Czech, Russian, German, French, English or Latin, as a learned Slav is quite indifferent to such a trifle as languages. They offer careful reviews and synopses of the contributions to this branch from all the avenues of scientific literature. The journal is so useful that it will surely be well patronized by the Slavonic antiquaries.

ANCIENT LABOR UNIONS.

A powerful social force, which the ethnologist is apt to overlook, is that of the commercial and labor unions which we call 'gilds.' An excellent illustration of their influence in early society is presented in an article by Professor E. W. Hopkins in the *Yale Review* (May and August, 1898). He studies them as they have existed in India for nearly 3,000 years. In the Laws of Manu the rules of the gilds are reckoned on a par with those of castes and families. Five hundred years later they had reached such a degree of supremacy that the precept is laid down: "The king must approve of whatever the gilds do, whether it is cruel or kind!" The most rabid labor unionist of our time could not wish for more.

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SCIENTIFIC NOTES AND NEWS.

BULLETIN OF THE U. S. GEOLOGICAL SURVEY DESCRIPTIVE OF THE EDUCATIONAL SERIES OF ROCK SPECIMENS.

Perceiving that the field parties of the United States Geological Survey had, in the course of their regular work, exceptional opportunities for making such a collection, it was determined by the Director of the Survey away back in 1882 to have these parties collect duplicate type specimens of rocks, with a view to the making-up of suites for the use of the educational institutions of the country for teaching purposes. Under the immediate direction of Mr. J. S. Diller, who has had the assistance, from time to time, of other geologists and petrographers, the work of collecting was begun and carried to completion and the material was segregated, numbered and described. The suites, numbering two hundred and fifty and comprising about one hundred and sixty specimens each, were about a year ago distributed to the universities, colleges and other institutions of learning which had made application therefor.

An important feature of the undertaking, however, was still unfinished when the suites were sent out, viz., a hand-book for the use of the student. This has just been printed. It comprises 400 pages of text and 65 illustrations. It is devoted in the main to descriptions, written by sixteen different specialists connected with the Survey, of the rocks comprising the collection, although it also contains chapters on rocks in general and their study, including observations on structural features, methods of physical analysis, the principal rock-making minerals and rock classification. The work, which will be a valuable accessory to a valuable rock collection, is published as Bulletin 150 of the Geological Survey series, under the title, 'The Educational Series of Rock Specimens, collected and distributed by the United States Geological Survey, by Joseph Silas Diller.' The cost of the bulletin is 25 cents, and it may be obtained by applying to the Director of the U. S. Geological Survey, Washington, D. C.

W. F. M.

THE GERMAN DEEP-SEA EXPEDITION.

Professor Chun, the leader of the German Deep-Sea Expedition, has sent to Sir John Murray some account of the progress of the work since the expedition left in August last on the steamship *Valdivia*, and this forms the basis of an article in the London *Times*. It will be re-